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27 June 1958

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MEMORANDUM FOR: Chief, AUTOMAT  
THROUGH: Chief, Collection Staff, SI  
FROM: Chief, Guided Missiles Division, SI  
SUBJECT: Final Propulsion Stages of Soviet Satellites

1. The USSR has orbited three earth satellites of varying weights, i.e., about 184 to 2900 pounds. From a pure requirements point of view, it is not necessary to use as powerful a propulsion system to orbit the light satellite as it is to orbit the heavy one. However, the Soviets have stated that they used military hardware to orbit their satellites and two additional factors stand out:

a. The launchings have been remarkably successful, as might be expected only if preceded by many prior firings of major components of the final system.

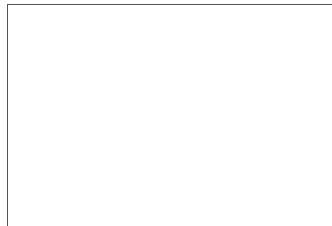
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3. The above data is requested at as early a date as is practicable, for we recognize that as of this date you do not have the photographic evidence of ~~SPUTNIK~~ III for examination. The urgency is dictated by the advanced status of work on the national estimate on Soviet guided missiles (NIE 11-5-58) and the effects your answer might have on our estimate of the Soviet ICBM (a missile which presumably uses the same propulsion system hardware that was used to orbit the Soviet earth satellites).

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cc - Mr. Roland Inlow, ORR

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